

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/642,941	STEVENS, CARLILE R.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Thuy V. Tran	2821	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 08/18/2003 & Telephone Interview held on 09/09/2004.
2. ☒ The allowed claim(s) is/are 1 and 8-10.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

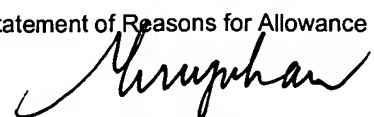
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 090904.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                                |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>090904</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment  |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                       |
|   | 9. <input type="checkbox"/> Other _____  |



Thuy V. Tran  
Examiner  
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### **DETAILED ACTION**

This is a response to the Applicant's filing on August 18<sup>th</sup>, 2003 and the telephone interview held on September 9<sup>th</sup>, 2004. Accordingly:

- Claims 1-10 are originally filed;
- Claims 2-7 are canceled by virtue of this interview; and
- Claims 1 and 8-10 are now presented in the instant application.

#### ***Examiner's Amendment***

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Roger A. Marrs on September 9<sup>th</sup>, 2004. The amendment includes:

#### ***\* In the Abstract:***

*Replace the original Abstract with the following new Abstract:*

*--A ballasting circuit is configured with a circuit having a capability of providing an isolated power supply to various external ballast accessories that interface with a circuit or device for determining the amount of illumination. The ballasting circuit also has a capability of providing isolated power for circuitry within itself such that they can be connected to communication wires external to a lighting fixture without the need of an additional power supply. The ballasting circuit includes one or more gas discharge lighting devices, a source of input power, an electronic ballasting circuit having a regulated direct current requirement and*

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*coupled between the one or more gas discharge lighting devices and the source of input power, a heater transformer, a low voltage direct current power supply, a switching device, a regulator circuit, a full wave rectifier, and windings.--;*

***\* In the specification:***

*Page 1, delete "Priority Claimed on SN.60-281,841 filed 4-6-01 (ABANDONED) and Continuation in part of patent application SN. 10/104,076 filed 3-21-02 (PENDING)" and insert --This application is a continuation-in-part of U.S. Application Serial Number 10/104,076 filed 03/21/2002, which is now U.S. Patent No. 6,628,093; which claims the benefit of provisional application Serial Number 60/281,841 filed on 04/06/2001 and now abandoned-- therefor;*

*Page 3, line 3, change "it's" to --its--;*

*Page 3, line 17, change "." to --;--- after "FIGURE 6";*

*Page 3, line 24, change "." to --; and-- after "isolator";*

*Page 3, line 26, insert --.-- after "FIGURE 7";*

***\* In the claims:***

*Claim 1, line 5, insert --one or more-- between "said" (first occurrence) and "gas"; change "device" to --devices--; and change ";" to --;--;*

*Claim 1, line 11, change "nearly" to --substantially--;*

*Claim 1, line 12, insert --one or more-- between "said" and "gas";*

*Claim 1, line 13, change "consisting of" to --comprising--; insert --one-- between "and" and "capacitor"; and insert --substantially-- between "the" and "square";*

*Claim 1, line 14, insert --a-- between "provide" and "proper"; and insert --one or more-- between "said" and "gas";*

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*Claim 1, line 17, change "the" to --an--; and insert --one or more-- between "said" and "gas"; and change "." to --;--;*

*Claim 1, starting from the line following line 17, add:*

*--a heater transformer having a primary winding effectively connected across a connection between said impedance network and said one or more gas discharge lighting devices, and secondary windings as required to drive one or more heaters within said one or more gas discharge lighting devices incorporated as part of said heater transformer;*

*a low voltage direct current power supply to provide power to said controlling device as well as switching power to said controllable output direct current -to- alternating current inverter;*

*a switching device connected to an output of said alternating current -to- direct current conversion means to supply power to said low voltage direct current power supply when operation first commences; and*

*an additional winding on said heater transformer with its output rectified to produce direct current to supply said low voltage direct current power supply after operation has commenced with said switching device, that is connected to the output of said alternating -to- direct current conversion means, biased into a non-conduction mode by the rectified output of said additional winding on said heater transformer.--;*

*Claim 2: canceled;*

*Claim 3: canceled;*

*Claim 4: canceled;*

*Claim 5: canceled;*

*Claim 6: canceled;*

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*Claim 7: canceled;*

*Claim 8, line 1, change "7" to --1--;*

*Claim 8, line 2, insert --one or more-- between "said" and "gas";*

*Claim 8, line 4, insert --one or more-- between "said" and "gas";*

*Claim 9, line 1, change "7" to --1--;*

*Claim 9, line 4, insert --a-- in front of "full";*

*Claim 10, line 4, change "the" to --an--;*

*Claim 10, line 6, insert --having-- between "resistor" and "values";*

*Claim 10, line 7, change "the" to --a--;*

*Claim 10, line 8, change "with its" to --having a--; change "forth" to --fourth--; and change "the" to --a--;*

*Claim 10, line 9, change "its" to --a--;*

*Claim 10, line 10, change "the" (first occurrence) to --an--;*

*Claim 10, line 13, change "forth" to --fourth--; insert --a common of-- between "and" (second occurrence) and "said" (second occurrence); and change "supply's common" to --supply--;*

*Claim 10, line 16, insert --said-- between "for" and "first" (second occurrence);*

*Claim 10, line 18, change "the" to --a--;*

*Claim 10, line 21, change "with its" to --having a--;*

*Claim 10, line 23, insert --having a-- between "comparator" and "positive";*

*Claim 10, line 24, change "the" to --an--.*

***\* In the drawings:***

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*Fig. 1: labeled as --PRIOR ART--.*

*\*\*\* Applicant is also noted that a replacement set of drawings including all Figs. 1-8 with (1) corrected label Prior Art to Fig. 1, (2) all figures separate from each other (not too close as originally filed), and (3) legible reference numerals to Figs. 1-8 must be submitted as discussed during the interview held on 09/9/2004.*

***Allowable Subject Matter***

2. Claims 1 and 8-10 are allowed.

***Reasons for Allowance***

3. The following is an examiner's statement of reasons for allowance:

Prior art fails to disclose or fairly suggest:

\* A gas discharge lighting system comprising (1) a heater transformer having a primary winding effectively connected across a connection between said impedance network and said one or more gas discharge lighting devices, and secondary windings as required to drive one or more heaters within said one or more gas discharge lighting devices incorporated as part of said heater transformer; (2) a low voltage direct current power supply to provide power to said controlling device as well as switching power to said controllable output direct current -to- alternating current inverter; (3) a switching device connected to an output of said alternating current -to- direct current conversion means to supply power to said low voltage direct current power supply when operation first commences; and (4) an additional winding on said heater transformer with its output rectified to produce direct current to supply said low voltage direct current power supply after operation has commenced with said switching device, that is connected to the output

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of said alternating -to- direct current conversion means, biased into a non-conduction mode by the rectified output of said additional winding on said heater transformer, in combination with the remaining claimed limitations as called for in independent claim 1 (claims 8-10 are allowed since they are dependent on claim 1).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

*Citation of relevant prior art*

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art Tao et al. (U.S. Patent No. 6,696,803) discloses a simplified electronic ballast circuit for a discharge lamp.

Prior art Melis et al. (U.S. Patent No. 6,329,761) discloses a switch mode power inverter.

Prior art Roman (U.S. Patent No. 6,259,215) discloses an electronic ballast circuit.

Prior art Hedrei et al. (U.S. Patent No. 6,072,283) discloses an electronic ballast circuit with a micro-controller.

Prior art Paul et al. (U.S. Patent No. 5,677,602) discloses a high-frequency electronic ballast.

Prior art Luger (U.S. Patent No. 5,600,211) discloses an electronic ballast for gas discharge lamps.

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Prior art Griffin (U.S. Patent No. 5,371,439) discloses an electronic ballast for gas discharge lamps.

Prior art Stevens (U.S. Patent No. 4,277,728) discloses a power supply for a HID lamp.

***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy V. Tran whose telephone number is (571) 272-1828. The examiner can normally be reached on M-F (8:00 AM -5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thuy V. Tran  
Examiner  
Art Unit 2821

09/9/2004

